# Public Morks

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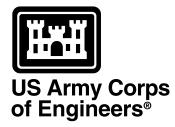
ISO Update



US Army Corps of Engineers®



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On the cover: One of two 17th century cannons captured by American forces in Japan at the end of World War II, currently guarding the front of Abbott Hall at Fort Belvoir, Virginia.







## **Installation Support Offices—Off and running!**

by Alexandra K. Stakhiv

s we all know by now, the Directorate of Military Programs is undergoing a major reengineer-

ing effort, where the former Center for Public Works (CPW) will become a division under Military Programs. "We are streamlining our internal organizations to improve our service to you,"said Kristine Allaman, Director of the Installation Support Center (ISC). "Military Programs now focuses on total life cycle of facilities, not just design and construction. Technical assistance vou used to receive

from CPW will now be available within your Corps region, easily accessible through your Program Manager/Installation Support (PM/IS) Forward or District PM."

Kristine Allaman

We have begun setting up Installation Support Offices (ISOs) at our divisions. A cornerstone of the Corps Military Programs Reengineering Plan, the ISOs were conceived as a way to regionalize Corps support to

Army installations, bringing lifecycle and operations and maintenance expertise closer to DPWs to the Army on a regional level.

Beginning in FY00,
the ISOs will be funded at levels to support
5-10 FTEs of effort and
40-60 percent of those
positions will be filled.
During FY 99, fifteen Installation Support Center staff
were relocated to the ISOs, some
as recently as a week or two ago.
(Remaining FY99 funds were used for

personnel moves.)

The flexible "checkbook" plan being used allows each Division to choose to use the personnel funding that would pay for some positions

as direct support to accomplish work for customers. Divisions

can fund a variety of staff or contracted services with the checkbook funds, or they may decide to use that funding to support contract development or other services.

Also, aside from the provision that there be a single "main" office and up to one "satellite," each division will determine how to set up and run its ISO. Most

divisions are putting this function in the Program Management or in the Engineering and Technical Services areas. Some have decided to locate their main office at a big military District, some in the Division office. Over time, best practices will evolve, because several different methods are being tested to meet the varying needs,

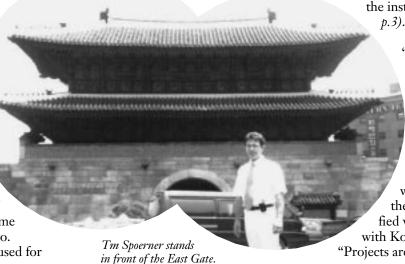
geography

and work styles. Regional teams are still looking at what is needed at your particular region. Geographics, missions, etc. will all be a little different from one place to another. "We don't want 'one size fits all," said Allaman. "We are doing our best to accommodate everyone and still see positive results across the entire Army."

The ISOs began staffing up at the beginning of the year, as Installation Support Center staff received their orders and began moving to new duty stations. First to move was Tom Spoerner, who left for Korea at the end of January. The ISO office at the Pacific Ocean Division (POD) consists of a group committed to HQ POD in Honolulu and a group forward deployed in Seoul, Korea. The ISO office in Seoul is attached to the Far East District (FED) as part of the Engineering Division. Frank Schmid (ISC) and COL Don Pawlowski (POD) helped kick-off the FED ISO with back-to-back presentations at the 19th TAACOM – DPW conference at YongSan Garrison in Seoul on the 26th of February. Shortly thereafter, Spoerner was out in the field completing an urgent project to 'unstick' a large PX project at Camp Humphreys. Completion of the project resulted in substan-

tial savings in demolition costs at the installation (See sidebar on

According to Spoerner,
"A forward deployed ISO
has the opportunity to
become familiar with
local conditions and,
therefore, get the most
'bang for the buck' out
of projects." This was
achieved in the Camp
Humphreys PX project
when immediate needs at
the installation were satisfied while producing output
with Korea-wide applicability.
"Projects are continually





assessed in an effort to deliver products with the broadest possible applicability," said Spoerner. The results include clarified demolition requirements at the installation level, lessons learned,

and identification of a previously unknown source of toxic material common in buildings in Korea.

"Our next project," said Spoerner, "is to produce environmental plans. Environmental projects are very sensitive to local conditions." Again, familiarity with local conditions, afforded by a forward deployed ISO, is expected to contribute to the Ed Irish value of the effort. Facility management projects are expected to proceed with equal fervor now that the other half of the FED ISO (Jack Geifer) has arrived in Korea.

All the while, the business of "standing-up" the ISO is proceeding. Missions, functions, and responsibilities are being refined. An operating agreement between the ISO and the 19th TAA-COM is in the works. An FED ISO web page is being constructed and will be used to let installations know what's happening at the ISO. Installations will also be able to contact FED ISO personnel or the 19th ISO liaison.

Combining forces with these Armywide providers, the ISOs can enhance the Corps ability to offer services on the regional level.

Here's how things are shaping up at some of the other Divisions:

North Atlantic Division is combining all its installation support resources, including OneStop, PM Forward and the ISO into a single entity managed by Programs Management Division.

Europe will continue its highly successful installation support program with Winston Jones' able assistance.

South Atlantic Division is directing its ISO through the Engineering Division. Savannah District, which has the biggest military support program within the Corps of Engineers, is the location for its primary cell. Mobile Dis-

trict, which is responsible for work in US Army's Southern Command, along with Fort Rucker and other stateside installations, is the satellite to the ISO.

Three staff members from ISC,

Ed Irish, Robin Banerjee, and Scott Monaghan, have moved to Savannah.

For five months now, this ISO has been working hard to become an integral part of SAD's installation support team, composed of senior project managers and forward deployed project managers from both Savannah and Mobile Districts. The team supports 10 major Army installations and 4 Major Army Commands located in SAD's

area of responsibility. In addition, the ISO has committed to assisting the Installation Support Center in supporting installations and MACOMs worldwide.

The SAD team has focused on its core capabilities of Real Property Planning, MILCON Programming, Competitive Sourcing, Utility Privatization and Supply Management. Although some support requires an onsite presence, much of the assistance to date has been accomplished using the electronic tools available to the DPW community. The Executive Information System

(EIS) and PAX have been particularly valuable here.

The SAD team's initial efforts have focused on Fort
Stewart. According to Irish, "Scott
Monaghan will be spending considerable time at Fort Stewart learning the
Master Planning business and helping
the staff develop MCA projects to upgrade many of the existing logistics
facilities." The entire team has also
committed to supporting the competitive sourcing solicitation for DPW

services to the installation. They're also working with Savannah District in developing a partnering initiative with the DPW.

"The SAD team has also provided support to the TRADOC Contracting Activity in its evaluation of Competitive Sourcing offers at Fort Lee," said Irish. "This is a high visibility area where ISOs and districts can provide valuable assistance to installations as they go through the process of identifying the most cost-effective manner of providing public works services to installation customers."

Other support to the DPW community included a review of the economic analyses for the FY 02 MILCON program. This effort highlighted numerous deficiencies in this critical element of project development. The team provided follow-on support to installations and MACOMs, including actual preparation of an economic analysis for US-ARSO; assistance to Wilmington District in the preparation of an analysis for Military Ocean Terminal, Sunny Point; and assistance to the Fort Leavenworth DPW in development of an analysis for the renovation of an academic facility.

> As one of the Army's two experts on Supply Management, Monaghan will most likely be

called on by installations throughout his region. The wave of the future— experts in highly-specialized fields like Monaghan may become resources the ISO shares throughout the Army and the Corps to support installation needs.

The South Pacific Di-

The South Pacific Division ISO consists of four

former ISC employees. Stationed at the Sacramento District Office, operations began in mid-March 1999. With responsibility for supporting Engineer customers throughout the Division's eight western states, the ISO is working installation issues intensively.



Scott Monaghan





This office consists of Ron Niemi, Dennis Vevang, Steve Roberts, and Jim Ledford. "We spend a considerable amount of time on customer sites at Presidio of Monterey (POM), Fort Huachuca, and Fort Irwin and provide onsite as well as telephonic support to

 Preparing specifications and drawings for replacement of (Fort

projects this ISO is working on:

several other Division customers," said

Niemi. Here's a sample of the kinds of

Huachuca) sewer lines, grease traps and kitchen drains.

> Management of high pressure boiler inspection contract (temporary until Huntsville assumes work), issuing support and work authorizations to DPWs around the US.

Advising Fort Gordon how to design a Utility Modernization program for its central steam plant and

distribution system.

• Providing technical guidance to contracting for negotiation of a steam distribution project at Hawthorne Army Depot.

- Providing scope of work for AE design modifications to admin area at Yuma Proving Grounds.
- Modifying the Performance Work Statement for Fire Protection at POM Annex.
- Assuming responsibility for all contract support formally provided by ISC to POM.

- Assisting in completion of PR&C for Deseret Chemical Depot fire sprinkler system modification.
- Completing a request for approval to procure a design/build contract for Tooele Army Depot.
- Meeting with Navy and MTMC officials to coordinate projects related to MTMC takeover of water front area at Concord Naval Weapons Station.
- Providing cost estimate to provide a Structural Engineer to complete seismic study at Hawthorne Army
- Assisting several Army customers with completion of DD1391s.
- Providing guidance on repair of water intrusion problem and LAN repair at POM.

"Customer support is our job, " said Niemi, "and we have completed 19 onsite visits to meet the customer, identify problem areas, and provide direct hands on support." While their initial goal was to provide support to Army customers, the SPD ISO is also

he ISO at the Far East District (FED) of the U.S. Army Corps of Engineers opened its doors for business in February of 1999. The 19th TAACOM of the EUSA immediately sent in a request for assistance.

A new \$5,000,000 PX and mall was in the works. The PX complex would be a key component in improving the quality of life at Camp Humphreys, Korea. Before construction of the PX could begin, 43 buildings had to be demolished. The problem was that the buildings couldn't be demolished until they were inspected, surveyed, and abated for asbestos.

A wide variety of facilities were scheduled for demolition or relocation. Facilities included temporary structures, permanent structures and a temporary skid-mounted building. Structures included buildings (Quonset Huts and conventional frame structures) and utility structures (e.g., water production and transmission facilities, roads, electrical transmission facilities,

### **ISO** to the rescue!

and fences). The buildings were used as offices, shopping facilities, work shops, warehouses, guard houses, and a bus stop. All buildings ranged in age from 16 to 47 years old with the majority dating from the 1950s and 1960s.

Although simple in design, several buildings had been substantially renovated or repaired. This complicated the asbestos survey by removing materials common to similar, undisturbed buildings while introducing a whole new set of building materials in renovated buildings.

ISO officer on the scene, Tom Spoerner, thoroughly inspected and surveyed the buildings, and the delivery order for the asbestos abatement was scoped and awarded in time to obligate the funds. End of story? Not quite. While the project was being executed, Spoerner looked for issues that would have wider applicability. Here's what he found:

- Careful pre-demolition asbestos surveys enhance safety. This survey identified over 16,000 square feet of asbestos containing material not found in the two previous surveys.
- Pre-demolition asbestos surveys save money. This survey reduced potential asbestos abatement costs by \$164,490.62.
- An unknown source of asbestos was identified in Quonset Huts. Asbestos was found in 11 percent of the interior lap joint sealant on the corrugated sheet metal shells of the huts.
- Phased abatement. Demolition activities are required due to the nature of the abatements, posing a coordination problem for the DPW. This problem was addressed as part of the ISO service to the DPW.

POC is Tom Spoerner, U.S. Army Corps of Engineers, Far East District, 02 2270-7735, DSN 721-7735, e-mail: thomas.spoerner@ pof02.usace.army.mil PWD





Clockwise from left: Tom Spoerner, Robin Banerjee, John Grigg, Dennis Milsten, Ed Gerstner, and Ron Niemi discuss ISO implementation.

supporting other DOD and civilian agencies (on a reimbursable basis) throughout the Division's area of responsibility.

Northwestern Division, on the other hand, is more inclined to work with its customers to find the best use for the fiscal resources the checkbook concept offers. Derrick Mitchell from ISC joined the Kansas City ISO last March. Just returning from the Army Staff Management College, he has a list of scopes of work from DPWs awaiting him.

John Grigg, formerly of ISC's Army Power Procurement Office, has relocated to USAED, Louisville (CELRL), part of the Great Lakes and Ohio River Division (CELRD), located in Cincinnati, Ohio. Grigg was the only ISC person to transfer to CELRD.

In Louisville, the ISO name has been changed to CSO, which stands for Customer Support Office. Upon arrival, Grigg found another program already had the ISO name. LRL Engineering Division is one of the first USACE organizations to be certified to ISO 9001 standards, the benchmark for quality.

The Louisville District's major customers are Fort Campbell, Fort Knox, several AMC installations, Wright-Patterson AFB, and Scott AFB. "Since Louisville already had a strong installation support program in-place," said Grigg, "finding a place to 'fit in' was easy."

"The Districts have historically been focused on MCA and large construction projects, and the time frames for those projects are years from concept to completion," explained Grigg. "Louisville District is adapting to our customer's needs for O&M projects and DPW support, and our focus is to provide quick and helpful response and grass roots DPW assistance."

"That's where I come in," the former military engineer officer says. "Most of my experience has been at the installation level, either as Assistant Division Engineer in the military or as a facilities engineer for different organizations. I know what the DPWs are going through, whether it is CA studies, privatization, lack of staff, or lack of funds. I also know that the DPWs are on the front line for quality-of-life issues, and sometimes need help *yesterday!* My goal is to be someone the DPW depends on and considers one of his team members."

An example of this kind of support happened recently at Fort Campbell, Kentucky, home of the 101st Airborne Division (Air Assault). During a heat wave, three large chillers used

### Supply Assistance— Just a phone, FAX, e-mail away

s many of you know, the Center for Public Works (CPW) underwent a major change. With this change came opportunity... the opportunity to realign with other organizational structures to gain greater efficiency and synergy, and continue serving as catalysts for innovation.

Although CPW is history, its former employees are not. While we are not the old organization that you remember or used to know, the functional and technical assistance that CPW used to perform can still be found through the Installation Support Center (ISC), Installation Support Offices (ISO), or the U.S. Army Engineering and Support Center, Huntsville, Alabama.

DPW Supply and logistics was one of the functions transferred to the U.S. Army Engineering and Support Center, Huntsville. Huntsville can provide advice, assistance, and consultation services focused on logistical matters in the following areas:

- Supply Program Management
  - Work Flow Analysis
  - Storage Space Management
  - Care and Preservation of Supplies
  - Issue, Receiving, and Shipping
  - Excess and Inventory Management
  - Just-in-Time
- Supply Systems Analysis
- Statements of Work for Supply Support
- Supply Requirements Contracts
- Outsourcing (PWS, SOW, etc.)
- Consolidations (DPW/DOL)

So, if you are faced with tough challenging decisions and need expert logistical assistance, on-site assistance, or simply a supply operation evaluation, call Huntsville. They can guide you and help you make the right decisions to ensure constant, effective, and efficient management of available resources.

For further assistance, please contact Karl S. Thompson, (256) 895-1275 DSN 760, e-mail: karl.s.thompson@hnd01.usace.army.mil



for cooling several troop barracks broke down. Troops were opting to sleep in their cars in the parking lot, or staying in local hotels at their own expense. Needless to say, the CG was not happy, and the DPW had to fix the problem.

The DPW had recently heard Grigg's pitch about the new ISO program at a customer conference, and challenged him to come up with a solution. Grigg responded by putting together a "tiger team" from LRL, HNC, Fort Campbell, and the contractor who originally installed the equipment. On short notice, the Corps team traveled to Fort Campbell and developed a shortterm plan to get the chillers back on line, and a long-term solution to replace them with more reliable equipment. The chillers were back on line within 48 hours, and will be rehabilitated or replaced after the cooling season.

Although the funds for the repairs and replacement will come from the installation's OMA account, Grigg was able to fund the Corps' cost to respond immediately and assist the DPW in developing a plan of action. "For a small amount of 'checkbook' funding," said Grigg, "the Corps earned 'a heap of respect' from one of our customers."

LRL plans to staff the CSO with two or three full-time employees, and use the "checkbook" to get the right skills needed by the customers.

Southwestern Division, whose ISO is located in Dallas with satellites at Fort Bliss and Fort Polk, will also combine people and checkbook funds. Tom Luu

recently arrived in Dallas and the Digest expects to hear from him very soon.

"As members of the Installation Support Center staff," said Allaman, "these people were more like specialists working in one of the areas of expertise we offered the Army. But that specialty isn't what makes them so valuable—it's the knowledge they've gained about contract management, installation needs and the variety of factors at work in Army DPWs." In this way, building on what they learned as national resources, the new ISO members are leveraging and creating the best in regional services.

While the ISOs will be near at hand as a resource for the Corps' Installation Support customers, other parts of the

Military Programs Reeingineering Plan address the central functions and policy and program management needs of the Installation Support Mission.

The thrust of this reengingeering effort has been to ensure that Life Cycle Management of facilities and infrastructure is adequately supported. HQ USACE, Directorate of Military Programs has reduced the number of people, but, at the same time, increased the amount of support to continuing

operations and maintenance support for installations.

The Environmental Division has added people to give more emphasis to the Compliance aspect of infrastructure management. The areas of solid waster management, water and water treatment systems, and sanitary engineering are now being covered by ISC's former

> employees Greg Jones, Bob Fenlason and Malcolm McCleod.

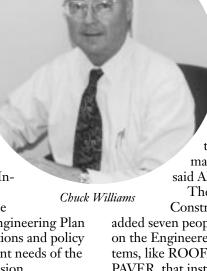
Programs Management is picking up the Energy Conservation measurement and reporting function. "The Corps needs to integrate conservation into our thinking about construction and long-term management of facilities," said Allaman.

The Engineering and Construction Division has

added seven people whose focus will be on the Engineered Management Systems, like ROOFER, RAILER, and PAVER, that installations use to sustain major systems effectively. They are Ken Zandler, John Lanzarone, Chuck Racine, Mike Dean, Harry Goradia, Nelson Labbé, and Dave Bohl.

"In our Installation Support Division," said Allaman, "we will have about 40 people working for installations to ensure that key technical services have the right policy and program backupthat includes everything from master planning and the IFS system to business processes, engineering operations, and the Public Works Digest.'

The National Team (made up of representatives from MACOMs, installations and divisions) made it very clear that the Army needed a Central source for one-of-a-kind functions. To that end, Chuck Williams, Karl Thompson, and Ed Gerstner have been transferred to Huntsville, Alabama. Installations can now go to the Installation Support Center of Expertise, located in Huntsville at the Engineering and Support Center, for Systems support, Supply management (see Sidebar on p.4), Equipment



Tom Luu (left) and Richard Duong.

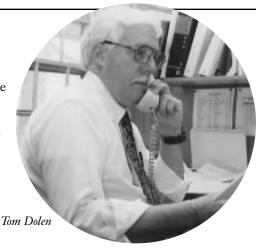


management, Army Power Procurement (rate cases and interventions), Utilities Privatization assistance, and Fire Prevention and Protection (once Tom Dolen relocates sometime in November). This organization will be headed up by Mirko Rakija, who is returning from an assignment at the DCSENG USAREUR.

If you need assistance, pick the ISO closest to your installation. They are accessible through your PM or IS For-

ward or your District PM (or by direct contact if you don't have a PM). They are your link to seamless installation support. "We wanted focal points in the field because that's where you are," said Allaman. "The ISOs were created to enhance our capability to work together as a corporate team supporting the Army."

Alexandra K. Stakhiv is the editor of the Public Works Digest.



## Installation Support Offices and ISC Personnel Transferred

#### **ISO Office 1: CENAD**

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Mobile, AL

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#### **ISO Office 7: CENWD**

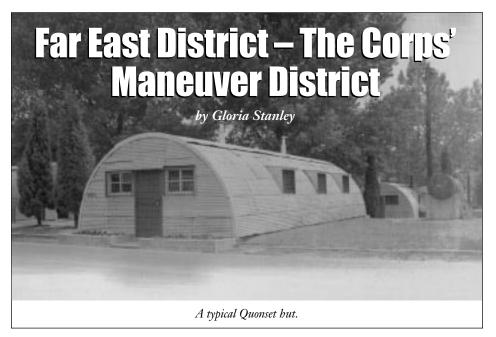
- Kansas City, MO
   Derrick Mitchell, (816) 983-3267, derrick.mitchell@nwk.usace.army.mil
- Seattle, WA

#### **ISO Office 8: CEMVD**

Rock Island, IL

#### **ISO Office 9: CETAC**

Kuwait



he Far East District, one of 41 Districts in the U.S. Army Corps of Engineers (USACE), is the Department of Defense designated design and construction agent for the Korean Peninsula. Since 1957, it has been involved in a wide variety of design and construction projects ranging from mountain-top sites to tidal basins and a host of projects to improve the war fighting capabilities and quality of life for the nearly 50,000 US Forces Korea military and civilian personnel, and their dependants, at approximately 90 installations throughout Korea.

Headquartered at a compound near the Tongdaemun (East Gate) in downtown Seoul, the Far East District has resident offices at Camp Casey in Tongduchon, Yongsan Garrison in Seoul, Ösan Air Base, and at Camp Henry in Taegu. The Far East District's workforce includes more than 320 civilians and 11 U.S. military personnel. Of the 320 civilians, nearly 200 are Korean Nationals.

The District is growing during Fiscal Year 1999 because of an increased workload. While the District's normal annual construction workload is \$175 -\$200 million, in FY99 our workload has doubled because of the August 1998, Area 1, flood damage recovery effort.

Its war fighting mission makes the Far East District unique in the U.S. Army Corps of Engineers. North and South Korea are not at peace; it is an

armistice situation and the Far East District operates accordingly. The Far East District is the Corps' Maneuver District. It has an active readiness program for District operations in support of OPLAN 5027 should we, regrettably, go to war with North Korea.

"We all hope and pray war doesn't break out, but if it does, we must be prepared," said COL David Rehbein, Commander, Far East District. "That's why readiness is so important."

"One of the challenges we face and are overcoming is the lack of time and funding we have for training," Rehbein said. "How to take an organization focusing on armistice conditions, having only a couple of weeks of readiness training a year, and make it come together is a challenge. Troop units train 90 percent of the time," he added.

The Far East District is in direct support of U.S. Forces Korea (USFK) for sustainment and general engineering and must be ready for a contingency. Unlike other Corps' Districts, the Far East District must be able to take on the nature of a maneuver unit and move out from its garrison location. It is the only military unit on the peninsula capable of designing and executing large-scale, complex engineering missions during the early phases of OPLAN execution.

"We are as close to a Maneuver District as any Corps' District is going to

get," said Rehbein. "No other District has an arms room, NBC (nuclear, biological, and chemical) clothing and equipment. No other District tactically deploys from its day-to-day office location and sets up a TOC (Tactical Operations Center)."

"The Far East District's role (in a contingency) is to provide technical engineering services, contingency contracting support, contract construction management, real estate services, and Logistics Civil Augmentation Program (LOGCAP) support to each USFK service component," said Patrick Crays, Emergency Manager, Far East District. The District must transition into a theater construction mode — simple, basic construction (quick and dirty) — and must be able to get things done quickly.

"It's not going to take just the U.S. military, but it will take working with everybody to accomplish the wartime mission," said LTC Mark Cain, Deputy Commander, Far East District. "Recently, there is more emphasis on engineering in the OPLAN. The challenge is to meet the heavy construction requirement, and we are getting tools and processes in place so we can perform that mission quickly during a contingency."

In contingency, the Far East District stands up an operations center in Taegu and sends liaisons to key components, agencies and organizations throughout the peninsula. A total force team of active duty personnel, IMAs and Emergency Essential Civilians/Mission Essential Civilians man our District's operations center (FEDOC) and serve as liaisons. There will be liaison officers for the Combined Rear Area Coordinator (CRAC), the Regional Construction Engineer Manager's Office, U.S. Marine Forces - Korea, Theater Automated Command Control Information System (TACCIMS), 7th Air Force, Eighth U.S. Army, and U.S. Naval Forces-Korea. We are increasing liaison with the CRAC from one to three or four engineers with more experience who can speak both English and Korean.

In addition, the District spent \$168,000 to renovate one of the buildings in the East Gate compound to create an additional Crisis Management Center (CMC).

Patrick Crays and Ken Pickler, Logistics Management Office, designed the facility renovation, which was done as part of the District's Job Order Contract (JOC). CPT Steve Walker, Programs and Project Management Division, is the project manager for the District's JOC and Rikki Rice, Seoul Project Office, was the project quality assurance representative for the renovation.

The renovation was completed just in time for the Spring 1999 Reception, Staging, Onward Movement and Integration (RSOI) exercise. RSOI is a major military exercise designed to test USFK's ability to receive troop units (personnel and equipment) into the theater of operations and integrate them into its force structure. RSOI 99 was the first time the District activated two operation centers— FEDOC at Taegu and CMC in Seoul. During the exercise, FEDOC provided situational

awareness, handled the intelligence and operations side of the mission and fed information to the Crisis Management Center. The CMC handled projects and engineering services requests.

Rehbein is working to bring more active duty military to the District and increasing the training emergency essential civilians receive in tactical operations. During the RSOI Exercise and other military exercises the Far East District participates in, lessons are learned and we are constantly improving our readiness for military missions during a contingency.

The Far East District exists to improve quality of life. For instance, we make life easier for the young soldiers, so they don't have to stay in Quonset huts. The District provides great facilities, constructed to the current tri-service standards used for military construction in the U.S.

Even though we face the same challenges all units have to overcome, such as maintaining perishable critical wartime skills, ensuring proper staffing, and ensuring we can support the significant engineering requirements in a contingency, we are overcoming these challenges. All members of the Far East District feel a sense of satisfaction and pride in knowing the work they do improves the quality of life for our U.S. military personnel and also supports one of our allies, the Republic of Korea, and its people.

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Gloria Stanley is a public affairs officer in the Far East District of the U.S. Army Corps of Engineers.

## **SAV** team visits Fort Campbell

by Milt Elder

The Installation Support Center and the Louisville COE District integrated resources to perform an extensive review of the Fort Campbell DPW's Performance Work Statement (PWS), developed as part of the U.S. Office of Management and Budget Commercial Activities Program.

The Installation Support Center (ISC) sent a three-member team to Fort Campbell to perform a Staff Assistance Visit (SAV) from 11-14 May, 1999. Team members included Fred Reid and Jane Anderson of CEISC, and Serge Drillock of E.L. HAMM, a commercial contractor.

Fort Campbell is yet another FORSCOM installation that ISC is assisting under the SAV program in reviewing their Performance Work Statement (PWS), developed by a contractor under the OMB Circular A-76 Commercial Activities Program. Thus far, a total of six FORSCOM installations have been similarly assisted in the review and final development of their contract Performance Work Statements.

With Bob Hohenberg, Contract Management Specialist, taking the lead, ISC employees reviewing the PWS were: Fred Reid, Jack Giefer, Karl Thompson, Mel McLeod, Richard Duong, Bob Fenlason, Jane Anderson, Nelson Labbe, Phil Conner, Greg Jones, Myron Kellberg, and Milt Elder. Serge Drillock of E.L.HAMM also contributed his recommenda-

All ISC review comments were electronically sent to the Fort Campbell DPW for evaluation before the 11-14 May meetings, when the final changes were made to the PWS.

Fort Campbell conducted two twoday meetings over the four-day period to perform a line-by-line review of the PWS. On 11-12 May, engineering and craft shop functions were reviewed; and on 13-14 May, work management and contract management were re-



viewed. The later meeting included representatives from the Fort Campbell JAG, DOL, CPOC and other installation directorates.

Jane Anderson attended the 11-12 May meeting to address ISC Engineering Directorate comments, the greatest por-

tion of which deal with water and wastewater management. Fred Reid and Serge Drillock attended the 13-14 May meeting for the final review of work management, supply operations, automated systems, engineering design, master planning and contracting.

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Milt Elder is the SAV Program Coordinator for ISC.

#### he U.S. Army Engineering and Support Center, Huntsville, recently awarded a contract for the construction and operation of a \$30-million steam production facility at a Pennsylvania Army depot — and it won't cost the depot a penny more than they are currently paying for utilities.

Although it sounds like a deal too good to be true, true it is. Through an innovative process called an Energy Savings Performance Contract, the depot's World War II-vintage steam plant will be replaced with state-of-the-art natural gas decentralized boilers. According to Plyler McManus, of Huntsville Center, Tobyhanna Army Depot was in danger of having production come to a "screeching halt" because of the rapidly deteriorating steam system. "Funding limitations have restricted the depot's ability to keep up with the maintenance of an aging system," explained McManus.

"We received a call from Joe Pearson, the depot representative, a little over a year ago because they had heard about our ESPC process and they hoped it offered them an alternative to traditional operations and maintenance funding," he said.

Indeed, ESPC is designed to provide government organizations with just that alternative. Through ESPC, Huntsville Center awards a contract to pre-selected contractors who have agreed to make capital investments to install new equipment or update existing systems that will result in significant energy savings. The federal organization pays for the new equipment through saved energy dollars; and the contractor, after financing the initial capital investment, is reimbursed for that investment and makes a profit from the energy savings generated by the project over a period of several years.

Huntsville Center has implemented several successful ESPC contracts in the past, but the job at Tobyhanna is the largest single installation award in the federal government. According to

## **Huntsville Corps** awards \$30 million **ESPC** contract for **Pennsylvania Army depot**

by Linda James

Huntsville Center's project team leader Angela Mullinix, the success of this ESPC revolved around the partnership that developed among the different elements involved — the Army depot, the Army Materiel Command, Huntsville Center, the Communications and Electronics Command, and the contractor HEC, Inc. of Natick, Massachusetts. "This project was extraordinary not only because of its scope but also because of the remarkable cooperation of everyone involved," she said.

For example, said Mullinix, the contractor consistently ensured that the very best price was received for equipment. In one instance, HEC negotiated with a vendor to reduce a portion of the costs on the project from an earlier estimated price of \$12 million down to \$8 million. "Bob Wolzmat at HEC was committed to the ESPC process and truly behaved as a government representative in the spirit of ESPC," she said. The depot leadership was also "tremendously supportive" of the project. "Joe Pearson at Tobyhanna brought everyone from maintenance employees to their commander into our meetings to ensure issues could be addressed up front and quickly," she said. "It was critical to the success of a project this size."

And, added Mullinix, there was the effort made by Huntsville Center contracting to "fast track" the award of the contract before interest rates were raised. "The effort by our contracting team members ensured that the project would proceed," explained Mullinix. "Even a small rise in interest rates could have meant hundreds of thousands of

dollars in costs to the ESPC contractor, and that could have resulted in the contractor pulling out, which would have been disastrous for the depot."

According to McManus, the depot will use the existing coalfired steam system for one more year. Construction on the new natural gas system will be complete in 2000. Expected savings including energy, operations and maintenance, and cost avoidance — should add up to about \$5 mil-

lion a year. "The savings are tremendous, but even more important to the Army, is that the depot will stay in production," said McManus. "An added bonus is the environmental benefit that the community receives by switching to the much cleaner natural gas fuel," he

According to McManus, the Huntsville Center Energy Team worked well together to bring the project together. "It takes a large group of people to make something like this happen," he said. The Huntsville team numbers about 80 people, said McManus, but a small core group of individuals led the Tobyhanna effort to success. The Huntsville/Tobyhanna team members included Bobby Harman, Kevin Burleson, Carol Sargent, Nick Etheridge, Donna Bliss, Margaret Simmons, Jeff Alford, Guy Wilson, Ron Burkhard, and Will White — all from Huntsville — and Joe Pearson from Tobyhanna, Raju Penmatcha from Army Materiel Command, Iim Ott from Communications and Electronics Command, and Jim Redden, Jess Franco, and Bob Wilcynski from HEC. "These folks were key to this project," he said. "But, Angela Mullinix, as the project team leader, has been truly committed to this for two years. Her ability to bring so many people together on such a challenging project was outstanding." PWD

Linda James is a public affairs specialist at the U.S. Army Engineering and Support Center, Huntsville.

# Anatomy of a cleanup

by Alicia Gregory

n 1986, the Marine Corps Air Station Beaufort discovered a 1500-gallon gasoline leak from an underground storage tank at the base gas station. Although the contamination is confined below the service station to an area that is 150 feet long by 100 feet wide, base personnel decided, after approximately 10 years of studies and proposals, that they would move forward with choosing a cleanup method.

They considered several options, including using an expensive soil vapor extraction system or allowing the contaminants to degrade naturally over time. But the base didn't have the money for the more expensive treatment, and they didn't want to wait the decades it would take for natural degradation to takes its course.

Enter Savannah District, U.S. Army Corps of Engineers with another option— a cleanup method that uses a substance called Oxygen Release Compound (ORC), which eliminates gasoline-related contamination of groundwater. Regenesis Bioremediation Products manufactures the product, which is a magnesium hydroxide compound stored in powder form that reacts when mixed with water. The compound is injected into the ground to generate a chemical reaction and eventual bio-degration of Benzene. (Benzene is a carcinogenic compound that is found in gasoline.)

"This is an inert material, much like milk of magnesia, with a special coating," explained Tom Whitacre, geologist and district technical manager for the project. "We mix the powder in water and make a slurry, then we inject it into the subsurface. It slowly gives off oxygen over a six-month period as it reacts with the contaminates and breaks them down into harmless byproducts."

Although this is the first time the district or any in-house Corps personnel have used ORC, it has been used on



Savannah District team members prepare compound to treat contamination site at MCAS Beaufort. (Photo by Jonas Jordan.)

hundreds of petroleum sites commercially. "ORC is safer than other injection products on the market," said Whitacre. "The other products can be much more chemically reactive and dangerous to use."

The base opted to use the ORC method, got a cost estimate, and sent Savannah District the funds, said Frank Araico, Installation Restoration Program manager.

The initial remedial design cost estimate for the soil vapor extraction system was between \$150,000 and \$250,000, but the district was able to offer the OCR alternative to the customer at a cost of \$80,000. Since the OCR option is a more cost-effective treatment technology, the base was able to save a substantial amount of money. Some of the savings was also due to the base dealing directly with a federal

agency and not having the expenditures associated with using a contractor (e.g., costs associated with getting bids; costs of modifications to the project, etc.).

The actual work—the injection process—took about a week. The dis-

trict injected the OCR slurry 1-10 feet below the surface at 110 locations throughout the contamination site using the Geoprobe. [Geoprobe uses a small diameter tube with a high-pressure pump to inject the compound into the ground.]

The district conducts two

rounds of performance monitoring— at two months and again at six months after the injection process is completed. Then the South Carolina Department of Health and Environmental Control requires periodic monitoring for the next year or so to verify that the contamination levels have dropped.

"We have the original levels of the contamination to use for comparison

during the monitoring process," said Whitacre.

"We don't have the in-house capabilities to do this type of work, and the district has made it easy for us to use their assets," said Alice Howard, Natur-

al Resources and Environmental officer at MCAS.

"We are doing this ourselves with our inhouse crews and inhouse equipment," said Whitacre. "Our in-house capability is a plus for the Savannah District. Many districts contract out this type of work, but you lose that technical edge when you don't do it yourself."

"The project has gone quite well," said Araico. "They even finished up two days early. The district has done exceptional work."

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Alicia Gregory is a public affairs specialist with the Savannah District.



66We don't have the

in-house capabilities

to do this type of work,

and the district has

made it easy for us to

use their assets. 99

-Alice Howard, Natural Resources

and Environmental officer at MCAS.

John Haskew (L) and Tom Whitacre of Savannah District's Geo-technical and HTRW Branch hook up injection lines on Geoprobe. The Geoprobe was used in the cleanup of the Marine Corps Air Ŝtation Beaufort. (Photo by Jonas Jordan.)

## **USACE** provides **support to** Balkan operations

by Torrie McAllister

fter three days of drenching rain in Tirana, Albania, COL Bill McCoy, Commander of the 130th Engineer Brigade, stood knee-deep in a sea of mud directing base camp and Apache Support Area preparations for V Corps. Combat heavy engineers were among the first on the scene to prepare for deployment of more than 2,000 troops, two squadrons of AH-64 Apache attack helicopters, and UH-60 Blackhawk utility helicopters for transport and medical evacuation.

Calling Europe District via satellite, McCoy requested a survey team with technical expertise for site evaluations and drainage plans to advise him on how to stabilize the quagmire. The next day, two Europe District civilians, Environmental Engineer and Force Protection Specialist Pat Brady, and Surveyor John Miller, were on the ground. Two geotechnical experts, Dr. Al Bush, from the Engineer Research and Development Center (ERDC), and Dan Glock from Baltimore District, were en route. Another environmental engineer, Rusty Mizelle from Europe District, had already deployed with the early entry combat engineers to help U.S. Army, Europe (USAREUR) prepare environmental baseline studies.

They will soon be reinforced by a TeleEngineering capability being established within Europe District by Len Husky from ERDC. Like telemedicine, which lets doctors consult on surgeries conducted half a world away, this sophisticated satellite communications system will let engineers collecting data in the Balkans hold real-time video consultations with technical experts anywhere in the Corps.

Rapid response to military contingencies is a forte of the engineer regiment— the combined muscle and talent of military engineers, and



U.S. Army Corps of Engineers civilians who volunteer to deploy on a moments notice wherever national security strategy requires.

The Corps, in partnership with USAREUR, is planning real estate, construction, and engineering support for NATO operations and deployment of Task Force Hawk in Albania. V Corps is orchestrating engineer support to the initial buildup of the task force. USAREUR Deputy Chief of Staff Engineer COL (P) Steve Hawkins is synchronizing the Army engineer support plan for the Balkans operation.

As it has in Bosnia, Croatia, and Hungary, USAREUR is using the sustainment services contract awarded by the Corps' Transatlantic Programs Center (TAC) to support soldiers being deployed for Task Force Hawk in Albania.

In early April, TAC tasked the contractor, Brown & Root Services, to begin planning for a temporary camp. Brown & Root Services is now on tap to provide temporary housing (tent complexes), food services, parking and road work, water, power generation, transportation services, mail delivery, and waste, trash, and disease vector control.

The top priorities are force protection and providing basic living conditions, i.e., building wooden platforms to get the tents out of the mud, and building mess halls, latrines, and showers.

The Chief of Engineers has designated MG Jerry Sinn, commander of North Atlantic Division, and NAD's Europe District, as the Corps' lead



Europe District Contract Specialist Dwight Dukes (left) and Europe District Environmental Engineer Rusty Mizelle review some paperwork at the Task Force Operations Center in Albania. (Photo by Erich Schuette)

element to coordinate USACE support to Balkan operations.

In a dynamic operation, where communications and response time are everything, the Corps is collocating liaison officers with European Command (EUCOM), USAREUR engineers and logisticians, and U.S. Air Force, Europe civil engineers.

In Albania, Dwight Dukes is Europe District's team leader and contracting

officer representative for the engineering aspects of Brown & Root's contract, together with the Defense Logistics Agency's Defense Contract Management District-International.

At EUCOM Headquarters in Stuttgart, Rich Dickson from Europe District is the Corps' liaison with the J-4 Engineer staff.

Europe District's Planning Officer, Scott Lowdermilk, has collocated with the USAREUR Deputy Chief of Staff Engineer's Military Engineering Topographic Branch to coordinate USACE activities and ensure synergy of effort.

In USAREUR's Deputy Chief of Staff for Logistics office, Bill Mills, TAC's Chief of Plans and Operations, is working along with logisticians to ensure the sustainment contract keeps pace with the fluidity of operations.

Carmine Leone is the first of several NAD engineers to deploy to Europe District's Operations and Readiness Center to synchronize USACE support.

"This is just the first wave of Corps talent," said John Daneker, Europe District's Operations Officer, who is organizing the deployment of all USACE personnel into Europe and the Balkans. "The Corps' CREST team is on standby to deploy in support of USAREUR real estate acquisition. We have volunteers from across the Corps identified and ready to support Balkan operations."

CREST is the Contingency Real Estate Support Team, a group of Corps real estate specialists prepared to deploy quickly to provide real estate support for deploying units.

Torrie McAllister is the public affairs officer for Europe District.

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## IBARIETO VARIAUGIIA

## **Seven wonders** of Belvoir

by Paul Haring

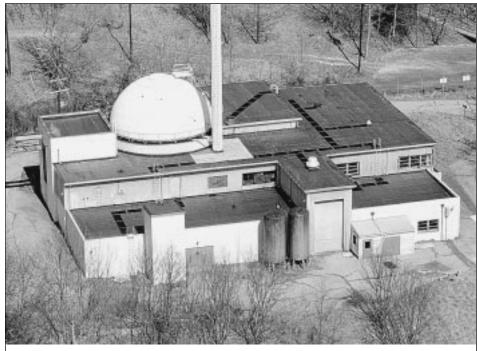
all them the seven wonders of Belvoir. From the 17th century can-nons outside Abbott Hall to a deac-tivated 20th century nuclear power plant, Fort Belvoir is home, unofficially of course, to at least seven wonders that are far beyond the ordinary.

In locating the wonders, one finds bits and pieces of Fort Belvior's history, much of which is not passed along through the generations of transient soldiers. Here, in all their wonder, are seven curious and fascinating sights to behold.

#### **SM1 Nuclear Power Generator**

"The Atomic Energy Commission announced yesterday that the Washington area's first atomic power plant has been producing electricity at Fort Belvoir for more than a week," the Washington Post reported on April 17, 1957.

Belvoir's SM1, the Army's first nuclear power generator, was a prototype for testing, experimentation and training nuclear plant operators.



Enclosed by concrete walls and a dome, the SM1 Nuclear Power Generator is sealed off and checked quarterly. (All photos by Paul Haring)

In the 1950s, the Army was tasked to provide electricity for Air Force radar operations in the Arctic along the distant early warning line to serve as an early intercept of incoming Soviet aircraft. Seeking an alternative to fossil fuels, the Department of Defense decided to experiment with nuclear power.

In the 1960s, with the arrival of intercontinental ballistic missiles into the Soviet arsenal, the DEW line lost its military significance. The Air Force closed its radar operations, the Army shut down its nuclear facilities. SM1 was decommissioned in 1973.

Today, SM1 is environmentally safe and the nuclear fuel removed, said Dave Breeden, of the U.S. Army Corps of Engineers, which oversees the plant. The former reactor area, enclosed by concrete walls and a dome, is sealed off and checked quarterly. "There is no hazard to the public," Breeden said.

#### **Thermo-Con House**

Perhaps more of a wonder when it was created in 1949, an odd house located at 21st Street and Gunston Road was said to have risen like dough from its foundation.

The house was literally formed from a mold filled with the Thermo-Con cement mixture— ordinary cement, water and a patented formula of mineral origin. The material set for 45 minutes and during this time it expanded



Created in 1949, the Thermo-Con House served as the unofficial residence for the post Sergeant Major for many years.





One of two 17th century cannons captured by American forces in Japan at the end of World War II.

two and a half times its original size. At the time, Thermo-Con was a "new type building material creating such a stir in the construction field," according to the April 22, 1949 edition of the Belvoir Castle.

The Thermo-Con house, which served as the unofficial residence of the post sergeant major for many years, was constructed by the Corp of Engineers to test alternative building materials for possible use to construct residential dwellings for the Army. It is not certain exactly why the Army abandoned the Thermo-Con construction technique, but in general the "international" style of the building, spartan as it was, did not appeal to traditional American taste.

However, the thermo-con material earned a rave review in the *Belvoir Castle*, where it was written that "its qualities are almost legend— it floats, can be sawed with an ordinary carpenter's handsaw, drilled with a brace and bit; it holds nails and common wood screws, and its heat resistance and insulating qualities defy belief."

#### **17th century cannons**

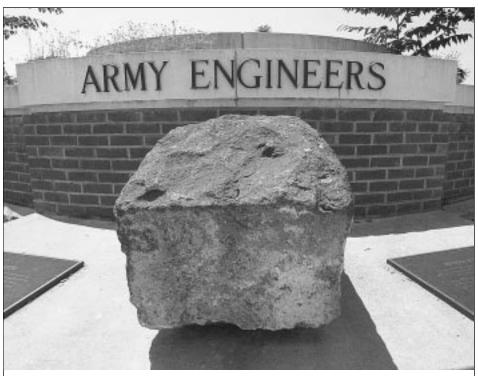
The two bronze cannons guarding the front of Abbott Hall were captured by American forces in Japan at the end of World War II. From inscriptions on the cannons, it is known that the cannons were cast in Holland in 1626 and 1628, respectively, by the metal foundry of Michael Burgerhuys in Middelburg. The guns were apparently taken to Japan by the Dutch East India Company, although it is uncertain why.

Japanese inscriptions are found on the gun tubes of both cannons. The inscription on the larger gun translates literally as "sky (or heaven) 13" and the other is "sky 15" These markings could indicate that they were guns 13 and 15 at a battery or fortification called Sky or Heaven in Japan. Both guns are intended to fire an 18-pound ball, but are currently plugged for display purposes.

#### **Remagen Bridge Stone**

A certificate of authenticity accompanying the 1978 donation of a stone from the Ludendorff railroad bridge at Remagen states: "Thus it was that the U.S. Army crossed into the Rhine in its final push against the Third Reich, and the nearly 2,000 year old city founded on the banks of the river by Roman Emperor Tiberius around 16 A.D. took its place in the annals of war history. The bridge at Remagen played a key role in the final chapter of World War II and its conquest has been recorded by history books as the 'Miracle at Remagen."

When members of 9th Armored Division reached the bridge spanning the Rhine River on March 7, 1945,



The Remagen Bridge Stone was donated in 1978 as a monument to the valor of Army engineers.



at 3:50 p.m., they found it intact but wired with explosives by the retreating Germans who planned to destroy it 10 minutes later. As the first charges exploded, Army engineers were scrambling down the abutments to cut the demolition cables. Although damaged, the bridge was saved, providing a means for tanks and numerous U.S. troops to cross into Germany. During the next 10 days, Army engineers fortified the bridge despite artillery and aerial bombardment until March 17 when it collapsed, killing 28 engineers.

GEN Dwight D. Eisenhower said having the Remagen bridge shortened the war by six months, and historians concur.

Located on 12th Street across from the Belvoir Chapel, the Remagen Bridge Stone is a monument to the valor of Army engineers who hastened the Allied movement into Germany and a reminder that for more than 70 years, Fort Belvoir was the home of the Army engineers.

#### **Headquarters Complex**

To fully appreciate the fact that the north post Headquarters Complex building occupies 806,000 square feet



Aerial view of the Headquarters Complex opened in 1995.

of Belvoir earth, it must viewed from the air. Inside, nearly 4,000 employees tackle a job much larger than the building in such agencies as the Defense Logistics Agency, Defense Contract Management Command, Defense Energy Supply Center and others. The complex opened in 1995, when the agencies moved from Cameron Station. This move represented Fort Belvoir's trans-

formation from the home of the engineers to a premier administrative and logistical support center for the National Capital Region.

#### **Treasury Column**

It looks like a column from ancient Rome or Greece, but is actually part of one of 30 original sandstone columns that supported the Treasury building in Washington, D.C., completed in 1842. By 1907, the original sandstone columns had deteriorated and were replaced by granite columns with many notable citizens acquiring one of the

Louis Hertle, who owned Gunston Hall, placed the piece, now in front of the Civilian Personnel Advisory Center building on Belvoir Road, in his garden in the 1920s. In 1950, Gunston Hall donated the column to the Engineer Center apparently because it was inconsistent with its restoration plans for George Mason's plantation.

The original Treasury building columns were carved from sandstone found in Aquia Creek near Occoquan in Prince William County, where the original stones for the Capitol, the White House and other federal buildings, also came. George Washington and city planner Pierre L'Enfant wanted to use the stones instead of expensive imported marble.



The Treasury Column is part of an original sandstone column that once supported the Treasury Building in Washington, D.C.





The Alpine Tower is a 50-foot hour-glass-shaped tower that was bought by Fort Belvoir's Directorate of Personnel and Community Activities.

#### **Alpine Tower**

The Bible states that on the seventh day of creation, God rested. So appropriately enough, the 7th wonder of Belvoir is recreation minded, although far from what most people would consider relaxing. In fact, the 50-foot hourglass-shaped tower near Tompkins Basin is intended to stretch the limits of anyone's comfort zone. People from the ages of 7 to 80 have used the tower in groups of 6 to 18 people to simulate rock climbing and overcome their fears while working together as a team.

The Directorate of Personnel and

Community Activities bought the tower about five years ago. Thousands of people have climbed the structure including teen groups, office groups, and church groups. Halfway to the top of the tower, climbers can sit in what's called a Karma seat, and write down their thoughts about the climb in a book stored near the seat. The Karma seat is said to be very calm and relaxing because it's at the apex of two triangles, according to Ronnie Green, who managed the tower for three years.

Paul Haring is the Belvoir Eagle Photo Editor. (Reprinted from the Belvoir Eagle.)

# Accountability threshold for hand tools increased

There has been a policy change to paragraph 7-6A in Army Regulation 735-5, Policy and Procedures for Property Accountability. Effective immediately, the threshold for the determination of durable hand tools is changed from the unit price of \$5.00 to \$50.00.

The change to Paragraph 7-6A will read as follows:

7-6. Durable Property. Durable property is personal property that is not consumed in use, does not require property book accountability, but because of its unique characteristics requires control when issued to the user. The following classes or types of property will be coded durable and responsibility assigned as follows:

A. All hand tools in Federal supply classes (FSC) 5110, 5120, 5130,5133, 5136, 5140, 5180, 5210, 5220, and 5280 with a unit price greater than \$50.00. When the unit of issue contains more than one item (e.g., package, box, dozen, etc.) and the cost of a single item (unit of measurement) is less than \$50.00, the hand tool will be treated as an expendable item at the user level, even though it is coded as durable in the FEDLOG.

POC is Earl Stinson, DALO-SMP, DSN 224-6756.

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## **Recycled plastic ties placed in turnout**

Navy depot has become the first known site to install recycled plastic railroad ties in a turnout. Crane Naval Surface Warfare Center in Indiana replaced 64 standard wood turnout ties with the plastic ties in December. Since then the turnout has serviced its regular traffic loading — some 30 moves a day in both directions by light engines and engines with loaded cars.

"So far the recycled plastic ties seem to be doing fine," said Tom Pinnick, planner and estimator responsible for Crane's track construction and maintenance. "They were covered with snow most of January in very cold weather, and with the thawing, we've seen no apparent signs of cracking or failure."

Crane installed the recycled plastic ties in partnership with the U.S. Army Construction Engineering Research Laboratory (CERL), Champaign, Illinois, and U.S. Plastic Lumber, Inc., Boca Raton, Florida. CERL has been doing research on recycled plastic materials for military use for several years. "In addition to providing an alternative to diminishing wood supplies, recycled plastic makes use of commingled waste plastic, which is a major solid waste problem in the United States," said CERL researcher Richard Lampo.

The recycled plastic railroad tie used at Crane was developed in a joint effort by CERL, Rutgers University, Conrail and Norfolk Southern railroad companies, and U.S. Plastic Lumber. The tie was designed to incorporate those features identified by the industry partners as critical to performance. And the railroad industry's interest in the new ties is very high: at the Association of American Railroads' Transportation Technology Test Center, Inc. in Pueblo, Colorado, 30 of the plastic ties have been tested in their Facility for Accelerated Service Testing (FAST) under heavy wheel loading for the equivalent of 5plus years of operation. So far they seem to be outperforming wood ties in side-by-side comparisons.

According to Pinnick, "Wood rots and deteriorates under traffic, so the ties become weaker and then you have problems with gauge widening. We wanted to see how the plastic ties will compare under actual traffic on a main service line."

Lampo noted that placing the ties in a turnout is significant because of the higher forces involved as traffic moves through the turnout curve, and because hardware and installation procedures are more complex. The longer service

life projected for the recycled plastic ties compared to wood — 50 years versus a typical life of 30 — could mean huge savings in maintenance costs for turnouts. "The Army only has about 2,400 miles of total track, but because of how it's used to mainly mobilize equipment and weapons, there are over 10,000 turnouts," Lampo explained.

The tie's manufacturer, U.S. Plastic Lumber, Inc., offers a 50-year guarantee. Dan Brink, Industrial Transportation Manager at U.S. Plastic Lumber, said, "This is an opportunity to demonstrate that the recycled plastic tie is versatile enough to use anywhere in the track system. Turnouts represent the extreme in terms of performance demands on a tie."

CERL and Crane also were interested in demonstrating different types of fasteners for the plastic ties. Using conventional equipment, the track crew installed the ties with a combination of cut spikes, screw spikes, and Pandrol fasteners. The turnout has 64 ties ranging from 9 to 16 feet in length.

The U.S. Plastic Lumber recycled plastic ties cost around \$125 per 8-1/2 foot standard tie, which may be more than twice the cost of wood ties depending on current market prices for wood. The installation cost is the same as for wood, or \$42 per standard tie. Areas where wood ties have high decay rates or where tie replacement is expensive (such as in turnouts, bridges, and locations with restricted or difficult access) may justify the higher initial costs. In addition, the increasing costs for disposal of chemically treated ties may make the infinitely recyclable plastic ties more attractive. For turnouts, plastic ties may have an immediate advantage over wood because of the high labor costs to replace switch ties and rebuild the turnout.

This spring, Crane plans to install additional standard ties on a curved section of track. The goal is to further assess alternative fastening options and track stability in relation to the ties' surface embossing.

For more information, please contact Richard Lampo at CERL, COMM 217-373-6765, toll-free 800-USA-CERL, or r-lampo@cecer.army.mil PWD



Using conventional equipment, the track crew installed the ties with a combination of cut spikes, screw spikes, and Pandrol fasteners. (Photo by SGT 1st Class Stephen M. Lum)



## Alternatives to TRIs listed in DLA FY99 Environmental Products Catalog

The Defense Logistics Agency (DLA) can provide possible alternatives to chemicals currently listed on the Toxic Release Inventory (TRI) compiled by the Environmental Protection Agency (EPA). The FY99 Environmental Products (EP) Catalog lists alternative products, which in some applications can replace the use of toxic chemicals listed on the TRI. This catalog can assist DoD installations in the reduction and use of these toxic chemicals by providing suggested alternatives which are more environmentally friendly.

Customers are reminded to check with the process owner, engineering support activitiy, etc. before substituting an environmental product for a specified hazardous item.

Of the top ten chemical releases and transfers by DoD from the 1996 reporting year baseline, the EP Catalog offers

suggested alternatives for the following:

- Dichloromethane
- Methyl Ethyl Ketone
- 1, 1, 1-Trichloroethane
- Ethylene Glycol
- Toluene

The EP Catalog lists suggested alternatives to these chemicals by product category. The manufacturer, product name and application are also listed. Possible alternatives, size, price, and National Stock Number (NSN) are included for customer convenience. The Inventory Control Point is listed along with technicaL support contacts who will gladly assist you with any questions or concerns you might have.

Each catalog contains a CD-ROM version. The catalog can also be accessed through the Internet at www.dscr.dla.mil. DLA is continuing its

efforts to find more environmentally friendly products as substitutes for the toxic chemicals on the TRI. In addition to these products, the EP Catalog offers over 900 possible alternatives within 20 broad categories for hazardous chemicals or processes now in use.

To receive a free copy or for more information about the catalog, please contact H.E. Rowland, Product Executive for Environmentally Preferred Products, at (804) 279-6054.

## 1999 Army Fire and Emergency Services Awards

#### **Fire Department of the Year:**

Fire Chief Verne Witham Fort Carson, Colorado

#### **Civilian Firefighter of the Year:**

Assistant Fire Chief Peter Queior Fort Drum, New York

#### **Military Firefighter of the Year:**

Staff Sergeant Donald P. Ray HQ 961st Engineer Battalion (Combat) (Heavy), Milwaukee, Wisconsin

#### Heroism:

Assistant Chief Bickett, Captain
McMaster, Firefighters Jerry
Shackleford and Richard Boring,
and Firefighters/Paramedics
Thomas Nabb, James Crozier
and Douglas Smutzer
Rock Island Arsenal F&ES, Rock
Island, Illinois



### **Doing it right!**

Trae Menard from the Hawaii Army National Guard's Environmental Office demonstrates the planting of native plants, as Lieutenant Governor Mazie Hirono and University of Hawaii Lab School junior Melia De-LaFontaine look on during the Aloha United Way's Youth Day of Caring at Diamond Head Crater, March 13, 1999. (Photo by SGT 1st Class Stephen M. Lum)

## The second second

### **Integrated Facilities System — Client Server (IFS-CS) ICP 12-01 passes first level of testing**

he Software Development Test (SDT) of IFS-CS Interim Change Package (ICP) #12-01 was successfully completed on 30 June 1999. This package supplies the two-way interface between IFS-CS and the Defense Property Accountability system (DPAS). The information passed back and forth will record the Army's real property assets, improvements and disposals in DPAS, setting the stage for depreciating the value of buildings and structures.

System changes addressed in this ICP are in compliance with the requirement set forth by the Department of Defense comptroller to achieve an unqualified accounting statement for DOD and the Army.

As part of this change, the capitalization records have been restructured. Capitalization information will now be captured at the facility level rather than at the use level. Also, improvement records for multi-use facilities will be consolidated where the Date of Capitalization was the same.

When ICP 12-01 is loaded, IFS-CS will be the source of DPAS information for all property in which the DPW has accountability and a financial interest. Improvements initiated by DOD activities and other tenants having a financial interest in the cost of the improvement will be recorded in DPAS by the tenant organization. The cost of these projects will be sent from DPAS to IFS-CS. DPAS will also send to IFS-CS the cumulative cost of depreciation for each facility and improvement.

Due to some unique requirements of the host governments in Europe, some additional information is required on the capitalization records for Europe sites. This has been accommodated on the screens. Other users will not be able to enter European type data. Provisions have been made to use the existing European data in the conversion from a local system.

A casualty of these changes has been the Real Property Standalone (RPS)

system. This PC version of Real Property accounting could not be upgraded to accommodate the required DPAS changes. Users of this system are in the process of being converted to IFS-C/S with central servers running multiple data bases

The Software Qualification Test (SOT) was conducted at the Installation Support Center (ISC) office on Fort Lee, 12-23 July 1999. This was done in

conjunction with the system developers at DPAS. The User Acceptance Test (UAT) will be conducted during the August 1999 timeframe at Letterkenny Army Depot. If all goes well, training and deployment will be accomplished in the 1st quarter of FY00 (October -December 1999).

NOC is Ken Ralph, (804) 734-2631 DSN 687, e-mail: ralphk@SDCL. lee.army.mil PWD

## information on new home page

he U.S. Army Information Systems Software Development Center at Fort Lee (USAISSDCL) has established a new home page with information about IFS. This site can be found at http://www.sdcl.army.mil. Once on the home page, look under the SDCL "Products" hot key in the lower left corner of the page to locate the IFS site.

This home page offers the Director for Public Works (DPW) community, IFS information for both technical and functional users. Currently, it includes the following types of information:

- System Overview
- Software and Hardware Operating Environment
- Customer Assistance Office Information
- Y2K Status
- Current and Future System Change Package/Interim Change Package Information
- Briefing Slides on the Modifications to the System required for



the IFS/DPAS Interface

- Credit Card Module Overview and
- Contract Management System (CMS) Development Information
- Commercial-Off-The Shelf (COTS) Product Information
- Links to the Small Computer Program and ISC/CPW home pages

In the future, this site will be reformatted and contain functional and technical Frequently Asked Questions (FAQ's), a place from which to download operating and applications software modifications, online Cookbook information, and other additional

Please use the e-mail addresses located under IFS Customer Assistance Office and Hotline hot key to address any questions or concerns related to the information provided on this IFS home page.

POC is Martha (Marty) Riedy, (804) 734-0467 DSN 687. PWD



## **HQ Executive Information System (HQEIS) update**

he HQEIS is a user friendly method for Headquarters, Department of Army (HQDA), Major Army Commands (MACOM), Office of the Secretary of Defense (OSD), Army Installations and DoD contractors to acquire information from IFS and other existing databases. The EIS is designed to allow users easy access to data without knowledge of Structured Query Language (SQL) or specialized computer skills. It is a multidimensional database that provides standard graphical, tabular and spatial displays for multiple levels and fiscal years. These displays allow users at all levels a means of analyzing Army facility data.

The EIS has minimal hardware and software requirements for the user. The HQEIS architecture uses a 3-tiered approach. This approach requires each user to load minimal software (1MB) on a PC to access the US Army Corps of Engineers Installation Support Center (CEISC) communications server (Winframe). The communications server provides the HQEIS software and all software necessary to connect to the HQEIS database server. This architecture allows for easy updating of the HQEIS screens and database, eliminates the logistics of distributing software updates to users, allows for better version control and security, eliminates the TCP/IP compatibility problems, simplifies the user's workstation and provides access to other facility databases (HQISR, ASIP). The HQEIS Winframe server can be accessed using an internet or modem connection and Winframe Client software. The HQEIS

Winframe client software is presently available on the CEISC EIS Home Page in the EIS Software Library (http://www.usacpw.belvoir.army.mil/eis/softwa~1/librar~1.htm).

Each user must request a username/password from CEISC to access the system. Instructions for loading/installing the Winframe Client are also on the CEISC Home Page at (http://www.usacpw.belvoir.army.mil/eis/software/install.htm).

The HQEIS database resides on a quad Pentium processor at CEISC. The HQEIS Real Property Inventory (RPI)

data is updated semi-annually and is currently FY99, Qtr 3. RPMA Cost data is currently FY97, Qtr 4 because the requirement to report the Technical Data Report (TDR) was lifted by ACSIM for FY98. Historical data is available for both Real Property and Costs. Only the most current quarter of data is retained for each FY. HQEIS (which includes the GIS module) displays data from existing

HeadQuarters

databases and sources such as: Integrated Facilities System (IFS), Real Property StandAlone (RPS), Desktop Resource Real Property System (DR-REAL) for National Guard

(NG) only, Army Stationing
Installation Plan (ASIP), Facility Reduction Program (FRP), McKinney Act,
Technical Data Report (TDR) for FY97
and prior, DFAS 218 Budget Report data
for FY98 and future, FRP Credits
(ACSIM), Headquarters Installation Status Report (HQISR), Best Available
Leased Database (BALD) and Construction Appropriations Programming, Control and Execution System (CAPCES).

HQEIS standard screens display: Plant Replacement Value, UPH (SF/Spaces), Family Housing (SF/Families), Vacant space, Inleased/Outgranted Square Footage, Acreage, Building Square Footage, RPMA Costs by TDAC (Redbook), etc. HQEIS/Geographical Information System (GIS) module will allow users to display Installations, Real

Property, Leases (BALD), Military Construction Projects (CAPCES), Real Property Conditions, Population (ASIP) and Base Realignment and Closure (BRAC) historical

data spatially. Standard Queries provide installation data by Facility Number, Space Assignment, 3-digit Category Code/5-digit category code queries, Trip Book Report, and Leases with various retrieval options.

Static displays include graphics and text charts for Essential Facility Requirements (EFR) and HQISR summary charts produced by the ACSIM. The Oracle Browser tool assists users in obtaining

data from the database that is not currently available on standard screen displays. Another username/password is required for access to Oracle Browser. Standard screens were designed to answer 80 to 90 percent of typical questions. Users can also access HQISR directly from the HQEIS main menu. On-line tools allow the user to copy EIS screens or data to a clipboard, export data to a file, print table or print screens.

Future EIS development includes a trends module to compare/analyze 10+ years of data, aggregating data by Army Controlled/Army Owned but Controlled by Others/Privately Owned in addition to Army Managed, OCAR Supporting Facilities

screen and GIS enhancements to include Utility Privatization, Excess space and possible Installation footprints.

The GIS allows the user to select conditions or filters on the data before creating a spatial or map view. All functional areas can be displayed by Organization and/or Geographically. The organization options allow the user to display data by major command, base, parent installation, installation or station. Geographic selections can be made by Country, Corps Division, Corps District, State, Congressional District or Radius. Geographic options are consistent for each area. Each functional area has unique conditions that can be applied: Real Property by Design Use or FCG, Type Construction, Ownership CAPCES Projects by FY, Cost, Status, Add-on Funding, Appropriation Leases by Space Type, Termination Date, Cost, Proponent Unit Strength by Unit Type, Unit Branch, FYHQISR by Cost, C-Rating and Infrastructure Grouping BRAC by Closure Status, Facility sort, Construction level.

A CEISC EIS Home Page is now available on the World Wide Web. Please visit our home page at <a href="http://www.usacpw.belvoir.army.mil">http://www.usacpw.belvoir.army.mil</a>. Click on the "Information" icon to access the "Executive Information System" link. For more information about HQEIS, contact Jeri King,(703) 428-6074 DSN 328, jeralyn.j.king@usace. army.mil



he U.S. Army Corps of Engineers is providing engineering support to NATO operations in the Balkans through TeleEngineering. Developed by the Corps' Engineering Research and Development Center at the Waterways Experiment Station in Vicksburg, TeleEngineering provides fast, efficient, real-time engineering support from technical experts anywhere in the Corps.

Through a network of secure, sophisticated, high-frequency, satellite communications systems, TeleEngineering allows engineers to collect data downrange and participate in real-time video consultations — tapping into the Corps' broad range of expertise.

Europe District Information Management Specialist Erich Schuette deployed in April to assist with the initial setup of the TeleEngineering equipment at the Task Force Operations Center in Albania.

"TeleEngineering is a portable door to the Corps," said Schuette. "Once everything is hooked up, it's as easy as making a phone call. For example, we were asked to take a look at a building in Albania to see if it was structurally sound. We videotaped the building and transmitted the video back to Europe District's Emergency Operations Center through our secure satellite communications link. At that point, Corps structural engineers who were at Europe District waiting to deploy to Albania, viewed the video. Through video teleconferencing, they were able to make their calculations and recommendations."

"We were also asked to make recommendations on improving an existing guard tower, added Schuette. "Video of the guard shack in Albania was taken and sent to us via our satellite link," he said. "At that point, Force Protection Specialist Ed Conrath from the Corps' Omaha District used his previous experience in Bosnia to make recommendations on improving the structure."

LTC Larry McCallister, Europe District Contract Construction Agent Team 1, is forward deployed to Albania, and works with TeleEngineering regularly. "The biggest benefit to TeleEngineering is the ability to conduct secure communications with several people at one time," he said. "I've been doing video teleconferences with USACE

## **Corps supports NATO** operations through **TeleEngineering**

by Marnah Woken

Headquarters and North Atlantic Division on the proposed future of the base here in Albania. During the teleconference, we had the charts on the wall so everyone could look at them at the same time, and we were able to zoom in and concentrate on a specific area if there were questions. It's so much easier than trying to explain everything over the telephone."

"We can also do a lot of preliminary analysis of the area without incurring the cost and time of deploying a lot of people," added McCallister. "Experts from the Corps view the video tapes we send them from where they are, do the analysis, and send the information back to us here in Albania."

Europe District Environmental Engineer Rusty Mizelle was also one of the first to deploy to Albania to conduct environmental surveys and develop a hazardous waste safety plan at the request of U.S. Army, Europe.

"TeleEngineering is a great way to transfer a large amount of data very quickly," said Mizelle. "U.S. Army, Europe needed a record of existing environmental conditions, so I conducted an Environmental Baseline Survey when I first arrived. Once I completed the survey, I had a lot of data to transfer - over 100 pages of information with digital photos. Because of TeleEngineering, I was able to send that data back to Europe District very quickly and it worked very well. In the past, we hand-carried the information which took a lot of valuable time."

"We're also working on a safety plan for the disposal of hazardous wastes that affect our soldiers downrange," he added. "With TeleEngineering, we're able to close the gap with the guys on the ground and our safety office at Europe District. As we develop the plan, we're having meetings via video teleconference which has a lot of benefits. It's just like talking

to someone face-to-face as opposed to a phone call or e-mail, and all of the players are involved at the same time."

Currently, communication via TeleEngineering is only available from point-to-point, but it's growing, according to Electrical Engineers Bryan Register and Jeff Powell from the Corps Waterways Experiment Station. Both Register and Powell worked on the initial setup of the equipment.

"Soon we'll have a multi-point bridge capability so we can connect up to eight sites at one time," said Register. "We'll be able to hold video teleconferences simultaneously — from Albania. to Europe District, to North Atlantic Division, to the Office of the Deputy Chief of Staff Engineer in Heidelberg. We're also looking at making the equipment in the field much more portable, and more compact. It's growing and changing daily."

Powell added that live feeds from Albania are currently available on video teleconference which allows for even more flexibility. "Right now we can do live feeds with a cable hookup to the camcorder," he said. "In the near future, we'll be able to conduct live feeds with audio, without any type of cable hookup. That allows the experts back at the Corps to actually tell the person running the camera to move in closer on a particular area."

The Corps has been working on the TeleEngineering concept for over a year, according to Physical Scientist Leonard Huskey of the Corps' Research and Development Center in Vicksburg. "We've been putting together a communications system that provides the entire spectrum of Corps of Engineers expertise to deployed military and civilian engineers downrange," said Huskey. TeleEngineering gives the deployed engineer access to that expertise — whether it's in North Atlantic Division, the Pacific Ocean Division, the Southwest Division, or the South Atlantic Division. With TeleEngineering, the Corps can offer a greater number of people to work the engineering challenge." PWD

Marnah Woken is a public affairs specialist at the Europe District.

## Public Works

